ANC SERIES

ANNUNCIATOR

Alarm Annunciator

USER MANUAL

Klemsan®

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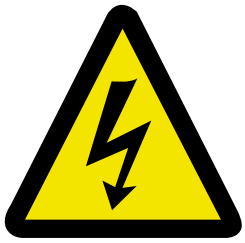
SYMBOLS

Caution:

Wherever used, this symbol indicates that there is important information that must be taken into consideration.

Danger of Electric Shock:

This symbol indicates that there is dangerous voltage or current.



GENERAL WARNINGS

- Do not work under live supply conditions. Before installation, turn off the power of the panel or any other related equipment.
- Installation, operation and putting into service of ANC16/ANC8 must be performed by qualified personnel.
- The device must be put into service only after all connections are made.
- Keep and store away from moisture, dust, vibration and wet environment.
- For cleaning, remove the dust with a dry cloth. Do not use abrasives, solvents or alcohol.
- There are no user serviceable parts inside. Maintenance and calibration can only be carried out at manufacturer's end.
- It is recommend to connect circuit breakers or automatic fuses between power input of ANC16/ANC8 and the network.

Manufacturer shall not be responsible for undesirable situations which may arise due to failure to comply with the warnings above.

ANC8 / ANC16 SHORT DESCRIPTION:

ANC-8/ANC-16 is utilized to track and record alarms from various applications. ANC8/ANC16 has 8/16 windows on the front panel lighted with red and green LEDs from background. Operator can monitor alarm indications by these windows. ANC16/ANC8 can record alarms with real time stamps. ANC8/ANC16 has an isolated RS485 port for the users to receive alarm data.

ANC-8 / ANC16 have the following features:

- 8 (ANC-8) or 16 (ANC-16) channels for signal input
- Double-colored, backlit display
- Assigning alarm channels to "HORN" or "ALARM" relay individually by a dip-switch
- "HORN" channels displayed by green and "ALARM" channels by red (when alarm signal is received)
- Isolated RS-485 port
- Standard MODBUS RTU protocol
- Real time clock supported by lithium battery (minimum 5 years of battery life)
- Real-time event recording up to 6080 logs
- 24V, 48V, 110V and 220V AC/DC signal input
- Two modes of operation for alarm detection:
  - when signal is received
  - when a continuous signal is interrupted
- Adjustable alarm detection delay (0-30 seconds)
- 2 operation modes when displaying an alarm: 'CONSTANT' and 'PULSE'
- With front panel keys; user can test display windows, verify and delete alarms
- Alarm warning with an internal buzzer
- 2 relay outputs named as "HORN" and "ALARM"
- Flexible configuration by dip-switches and MODBUS
- Low power consumption
- Wide supply range
- Wide operation temperature range

Receipt Control and Contents of Delivery

When you receive the package, please be sure that,

- packing is in good condition,
- product has not been damaged during transportation,
- product name and reference (order) number conforms to your order.

Order number	Description
604620	ANC8 (24V AC/DC)
604621	ANC8 (48V AC/DC)
604622	ANC8 (110V AC/DC)

Order number	Description
604623	ANC8 (220V AC/DC)
604630	ANC16 (24V AC/DC)
604631	ANC16 (48V AC/DC)
604632	ANC16 (110V AC/DC)
604633	ANC16 (220V AC/DC)

Please also check the contents of delivery as below:

ANC16:

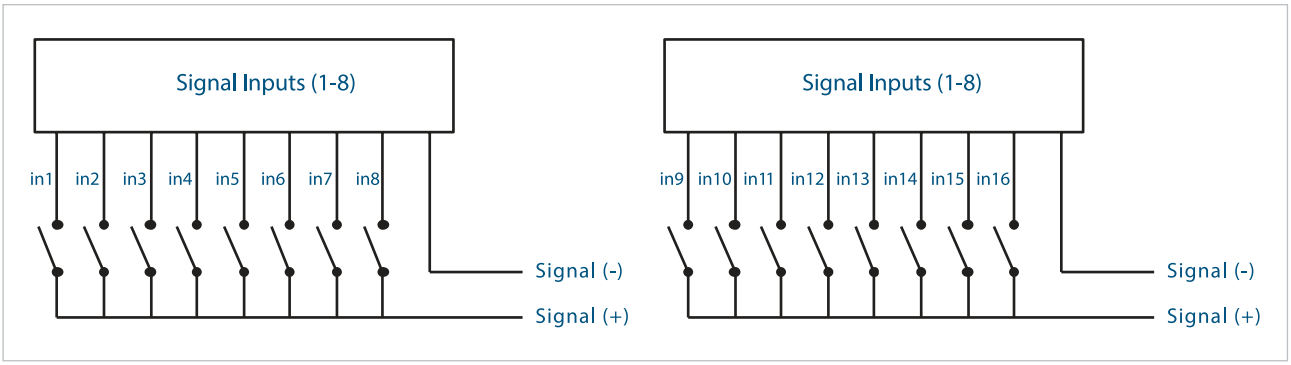
1 pc. ANC16
1 pc. CD-ROM
4 pcs fixing brackets and screws
1 pc. 2-pin female terminal block
1 pc. 4-pin female terminal block
2 pcs. 9-pin female terminal block
1 pc. 3-pin female terminal block
2 pc. Semi-transparent paper for front panel

ANC8:

1 pc. ANC8
1 pc. CD-ROM
2 pcs fixing brackets and screws
1 pc. 2-pin female terminal block
1 pc. 4-pin female terminal block
1 pc. 9-pin female terminal block
1 pc. 3-pin female terminal block
2 pcs. Semi-transparent paper for front panel

Signal Input

There are 8 signal inputs in ANC-8, and 16 signal inputs in ANC-16.
Voltage levels for signal inputs are 24V, 48V, 110V and 220V AC/DC.



LED Displays

There are 8 pcs of LED displays in ANC-8, and 16 pcs in ANC-16 each of which is assigned to an input channel. Whenever an alarm is generated in a channel, the related display will indicate that there is an alarm in that channel.

LED displays can flash with two colors as red and green. Channels adjusted as HORN (by dip-switches) will flash green, and channels adjusted as ALARM (by dip-switches) will flash red (refer to Alarm / Horn Status and Relays).

How displays operate

There are 4 kinds of flashing of LED displays:

Fast blinking
Slow blinking
Continuously flashing (turn on continuously)
Turn off

For ANC8 the first alarm / for ANC16 the first or the last alarm (depending on setting) display blinks faster than the remaining channel displays which also have an alarm condition.

- Assume there is an alarm in the 3rd channel. Third channel's display will blink fast.
- After a while, assume that there appear alarms in 7th, 8th and 9th channels. Then third channel will blink fast; seventh, eighth and ninth displays will blink slowly.
- When the operator presses on the "Ack" button, all the channels (only the 3rd channel – other channels already blink slowly) will blink slowly and also the related relay(s) deactivate(s) (horn and/or alarm relay – depending on the setting).
- After that; if alarm conditions disappeared, slow blinking channels will flash continuously (LEDs turn on continuously).
- In the above condition, when the operator presses "Del" button; all the continuously flashing displays will turn off.

Front Panel Keys

There are 4 key buttons on the front panel of the device as "HORN", "ACK", "DEL" and "TEST".

HORN: This key deactivates the buzzer (if the buzzer was adjusted to be active in case of an alarm).

ACK: This key is used to confirm (acknowledge) the alarm.
If the alarm condition is still on for the related channel(s); whenever ACK key is pressed,

- the fast blinking LED display (for ANC16 the first or the last alarm display/ for ANC8 the first alarm display) begins to blink slowly.
- slow blinking LED displays (channels, which have alarm condition, other than the above channel) remain to blink slowly.
- Alarm and/or Horn relay deactivate(s)

If the alarm condition is OFF for the related channel(s); whenever ACK key is pressed,

- All the blinking channels will flash continuously
- Alarm and/or Horn relay deactivate(s)

DEL: This key is used to delete the alarm. Operator can delete alarms only if alarm conditions have disappeared and operator has pressed "Ack" key before.

In such a condition, whenever DEL key is pressed, LED displays of the related channels will turn off.

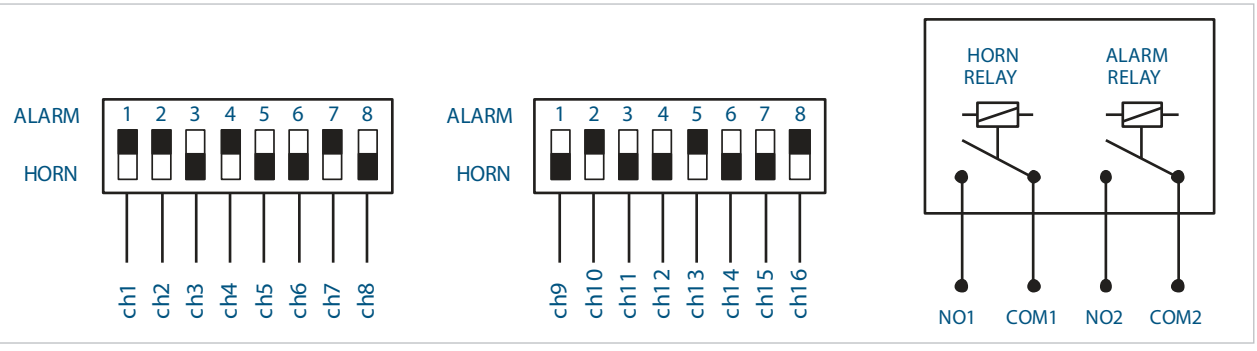
TEST: This key is merely used to test displays of channels. LED displays lights up in red and green, respectively as long as the TEST key is pressed.

Alarm / Horn Status Dip-switches and Relays

All input channels can be adjusted as "ALARM" or "HORN" channels individually by "Alarm/Horn Status" dip-switches.

When an alarm condition occurs in any of the input channels;
if the related display blinks red, this means that channel was adjusted to be an "Alarm" channel.
if the related display blinks green, this means that channel was adjusted to be a "Horn" channel.
Red LED displays are for "ALARM" channels

There are 2 relays available in ANC8/ANC16 named as "ALARM" and "HORN" relays.
Alarm channels are assigned to "ALARM" relay and horn channels are assigned to "HORN" relay. This means, whenever an alarm condition occurs in a channel adjusted as 'alarm channel'; alarm relay will activate.
Likewise, whenever an alarm condition occurs in a channel adjusted as 'horn channel'; horn relay will activate.

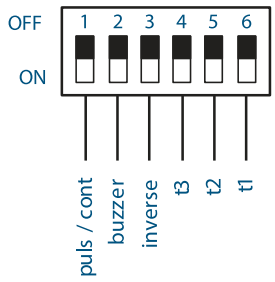

ALARM
HORN
1 2 3 4 5 6 7 8
ch1 ch2 ch3 ch4 ch5 ch6 ch7 ch8
ALARM
HORN
1 2 3 4 5 6 7 8
ch9 ch10 ch11 ch12 ch13 ch14 ch15 ch16
HORN RELAY
ALARM RELAY
NO1 COM1 NO2 COM2

Operator should reset the device after changing dip-switches.
Otherwise, ANC16/ANC8 will operate with the old dip-switch settings.

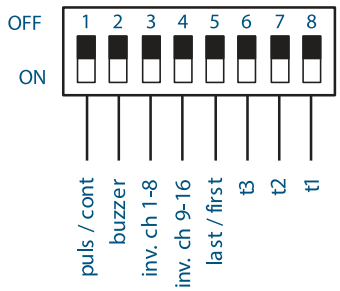
Device Configuration

The response of ANC8/ANC16 against input signals can be adjusted by dip-switch.

- Continuous / Pulse mode ("pulse / cont")
- Buzzer active / passive ("buzzer")
- Input signal inversion ("inverse" switch for ANC-8; "inv. Ch 1-8 " and "inv. Ch 9-16" switches for ANC-16)
- Last alarm / first alarm ("last / first" switch - only for ANC-16)
- Delay ("t3", "t2", "t1)



ANC-8 configuration dip-switches



ANC-16 configuration dip-switches

Continuous / Pulse Mode

ANC8/16 "CONTINUOUS" mode of operation:

When the "puls / cont" key in configuration dip-switch is in the OFF position, "CONTINUOUS" mode is selected.

- If at least one of the channels was adjusted as 'alarm channel' and an alarm condition is present in that channel → "ALARM" relay will energized continuously.
- If at least one of the channels was adjusted as 'horn channel' and an alarm condition is present in that channel "HORN" relay is energized continuously.
- If the buzzer is adjusted to be ON in case of an alarm, buzzer will be activated continuously.
- The relays and buzzer keep their current positions until the alarms are confirmed. When the user presses on "Ack" button, ALARM relay, HORN relay and the buzzer will be deactivated.

ANC8/16 "PULSE" mode of operation:

When the "puls / cont" key in configuration dip-switch is in the ON position, "PULSE" mode is selected.

- If at least one of the channels was adjusted as 'alarm channel' and an alarm condition is present in that channel → "ALARM" relay will be energized for 5 seconds and then de-energized.
- If at least one of the channels was adjusted as 'horn channel' and an alarm condition is present in that channel "HORN" relay is energized for 5 seconds and then de-energized.
- If the buzzer is adjusted to be ON in case of an alarm, buzzer will be activated for 5 seconds.

Buzzer Active / Passive

The built-in buzzer of ANC8/ANC16 can be activated/de-activated via the "BUZZER" adjustment key.

Input Signal Inversion

For ANC8 signal inversion dip-switch key is marked as "Inverse" at the rear cover of the device.

For ANC16 signal inversion dip-switch key is marked as "inv. Ch 1-8" or "inv. Ch 9-16" at the rear cover of the device.

When the above mentioned dip switch keys of ANC8/16 is in OFF position, ANC8/ANC16 will accept a high signal as an alarm. For example for 604630 - ANC16 (24V AC/DC) device; when a signal of 24 VACrms or 24VDC is present on anyone of the channels, that channel will accept this condition as an alarm.

When the above mentioned dip switch keys of ANC8/16 is in ON position, ANC8/ANC16 will accept a low signal as an alarm. For example, for 604630 - ANC16 (24V AC/DC) device; operation with no alarms can be possible only with 24VACrms or with 24VDC on all of the channels. When the continuous signal on anyone of the channels is interrupted, that channel will accept this condition as an alarm.

NOTE:
"inv. Ch 1-8" means "inverse channels 1 to 8 of ANC16"
"inv. Ch 9-16" means "inverse channels 9 to 16 of ANC16"

First Alarm / Last Alarm

ANC16

If the last/first switch is OFF in the configuration dip-switch, "FIRST ALARM" mode is selected. When the device is in "FIRST ALARM" mode, the first alarm blinks rapidly and all the next alarms blink slowly.

If the last/first switch is ON in the configuration dip-switch, "LAST ALARM" mode is selected. When the device is in "LAST ALARM" mode, last alarm blinks rapidly and all the previous alarms blink slowly.

ANC8

There is no last/first dip-switch key in ANC8. As a result, ANC-8 always operates in "first alarm" mode.

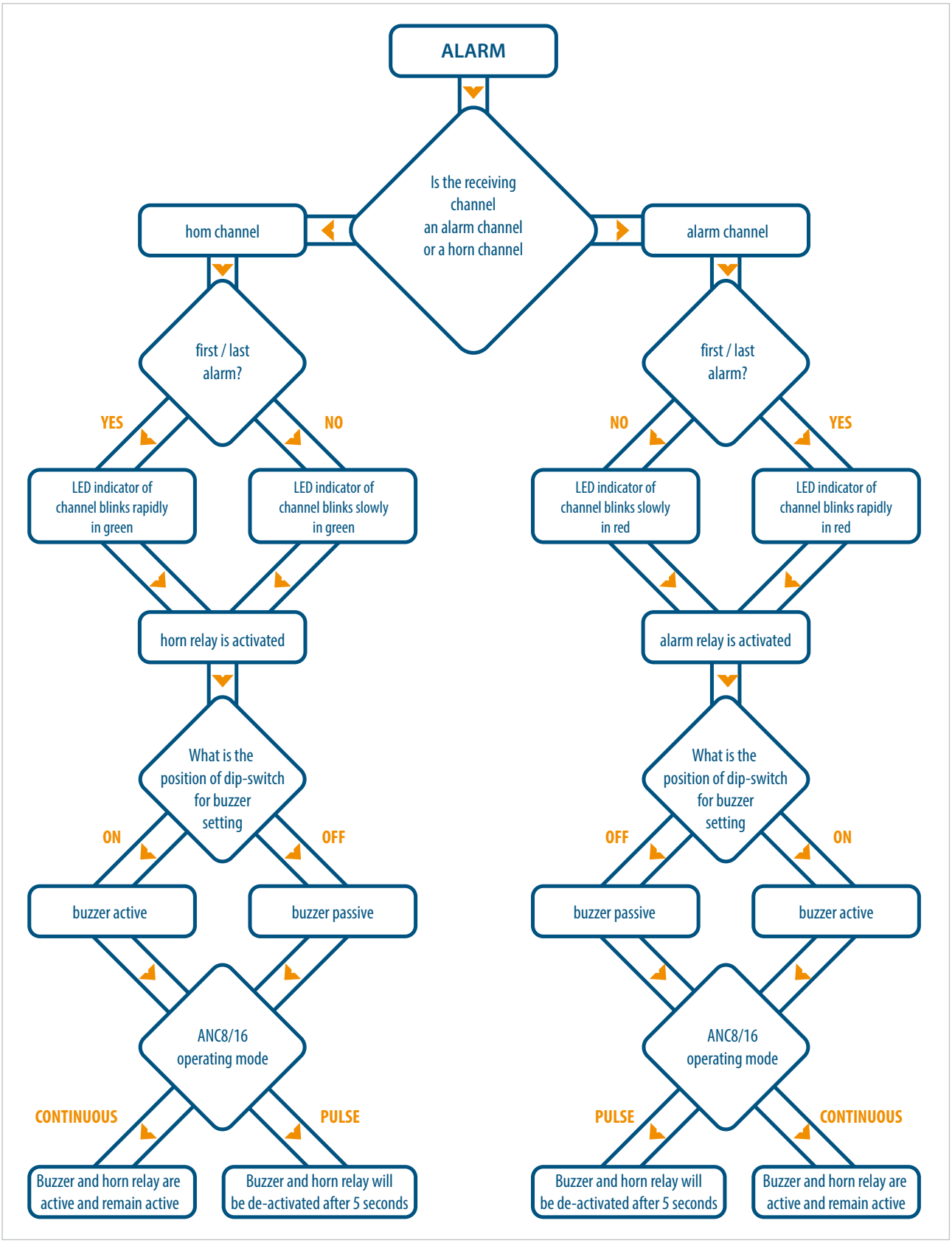
Delay Period

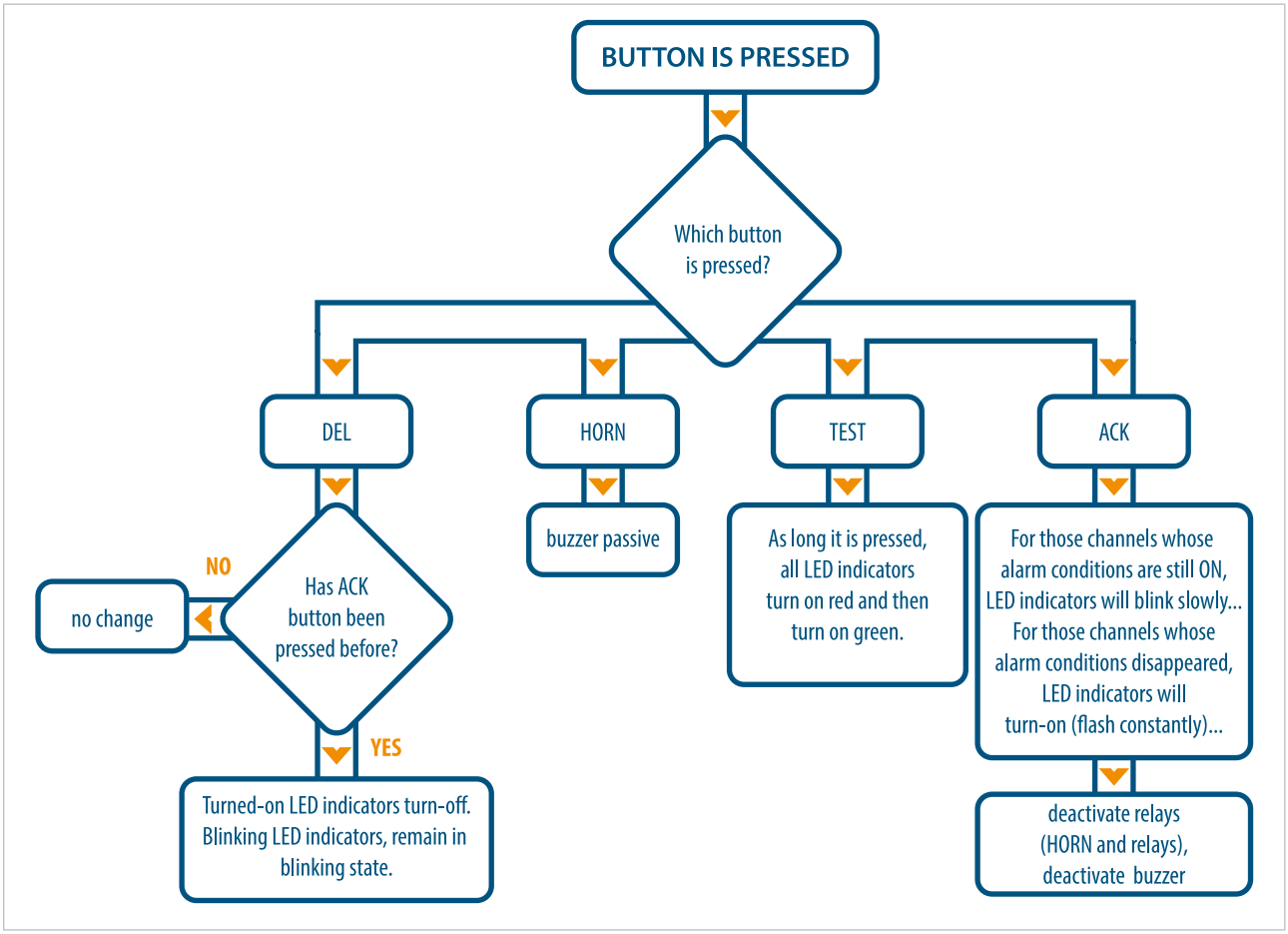
The alarm detection of the device can be delayed as long as the adjusted period. Delay period can be adjusted with the keys t1, t2, t3 in the configuration dip-switch as 0, 2, 5, 10, 15, 20, 25 and 30 seconds.

t3	t2	t1	Delay (seconds)
0	0	0	Off
0	0	1	2
0	1	0	5
0	1	1	10
1	0	0	15
1	0	1	20
1	1	0	25
1	1	1	30

Flow chart of ANC8/ANC16 Operation

ANC-8 and ANC-16 operate according to the algorithm below:


ALARM
Is the receiving channel an alarm channel or a horn channel
hom channel
alarm channel
first / last alarm?
first / last alarm?
YES
NO
NO
YES
LED indicator of channel blinks rapidly in green
LED indicator of channel blinks slowly in green
LED indicator of channel blinks slowly in red
LED indicator of channel blinks rapidly in red
horn relay is activated
alarm relay is activated
What is the position of dip-switch for buzzer setting
What is the position of dip-switch for buzzer setting
ON
OFF
OFF
ON
buzzer active
buzzer passive
buzzer passive
buzzer active
ANC8/16 operating mode
ANC8/16 operating mode
CONTINUOUS
PULSE
PULSE
CONTINUOUS
Buzzer and horn relay are active and remain active
Buzzer and horn relay will be de-activated after 5 seconds
Buzzer and horn relay will be de-activated after 5 seconds
Buzzer and horn relay are active and remain active


BUTTON IS PRESSED
Which button is pressed?
DEL
HORN
TEST
ACK
buzzer passive
As long it is pressed, all LED indicators turn on red and then turn on green.
For those channels whose alarm conditions are still ON, LED indicators will blink slowly... For those channels whose alarm conditions disappeared, LED indicators will turn-on (flash constantly)...
deactivate relays (HORN and relays), deactivate buzzer
NO
Has ACK button been pressed before?
no change
YES
Turned-on LED indicators turn-off. Blinking LED indicators, remain in blinking state.

Real Time Clock (RTC)

ANC8/ANC16 has a real time clock. Time adjustments can be accomplished via MODBUS (Refer to MODBUS table).

Log (Record)

ANC8/ANC16 can record 6080 alarm events with real time data.

Recorded events consist of the following data:

- Number of the channel on which alarm event appears/disappears
- Which buttons are pressed by the operator
- ANC8/ANC16 turn-on and turn-off times
- Reset (ANC8/ANC16 resets only if baud rate setting is changed via MODBUS)

Each record occupies 64 bits (8 bytes) in memory. It is as follows:

Day in BCD Format								Month in BCD Format							
63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48

Year in BCD Format (last two digits)								Hours in BCD Format							
47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32

Minutes in BCD Format								Seconds in BCD Format							
31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16

RSV	RST	PON	PDWN	HORN	ACK	DEL	TEST	RSV	RSV	RSV	ALMS	ALARM CHANNEL			
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0

Bit 63 – 56 : Day of month in BCD format
Bit 55 – 48 : Month in BCD format
Bit 47 – 40 : Year in BCD format (only the last two digits, i.e. 13 instead of 2013)
Bit 39 – 32 : Hours in BCD format
Bit 31 – 24 : Minutes in BCD format
Bit 23 – 16 : Seconds in BCD format
Bit 15 : Reserved
Bit 14 : Reset (ANC8/ANC16 resets only if baud rate setting is changed via MODBUS)
Bit 13 : ANC8/16 is powered-on
Bit 12 : ANC8/16 is powered -off
Bit 11 : HORN button is pressed
Bit 10 : ACK button is pressed
Bit 9 : DEL button is pressed
Bit 8 : TEST button is pressed
Bit 7 : Reserved
Bit 6 : Reserved
Bit 5 : Reserved
Bit 4 : Alarm status. 1 → alarm is generated; 0 → alarm condition disappeared.
Bit 3 -0 : Number of the channel where the event occurred. Data is in binary format.

BCD Format

"Binary coded decimal" (BCD) is a class of binary encodings of decimal numbers where each decimal digit is represented by a fixed number of bits. Usually 4 bits represent a digit by taking advantage of the fact that four bits are enough to represent the range 0 to 9. Likewise, in ANC8/ANC16, 4 bits represent a decimal digit.
For example, the decimal number 35 will be represented in BCD format as 0011 0101.
Refer to the below table for more examples.

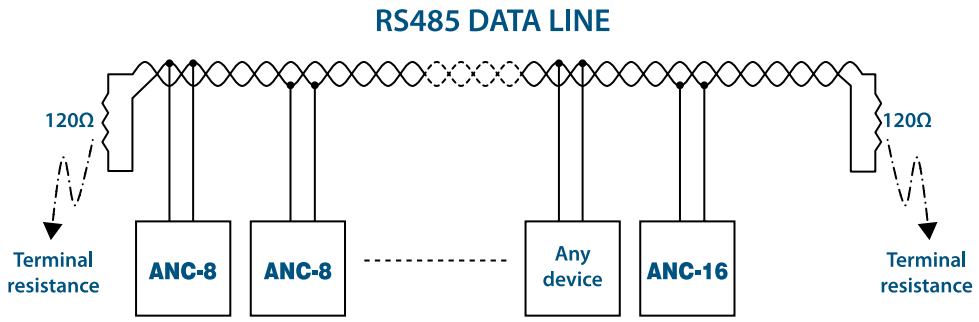
Decimal	Binary	BCD
0	0000	0000 0000
1	0001	0000 0001
2	0010	0000 0010
3	0011	0000 0011
4	0100	0000 0100
5	0101	0000 0101
6	0110	0000 0110
7	0111	0000 0111
8	1000	0000 1000
9	1001	0000 1001
10	1010	0001 0000
11	1011	0001 0001
12	1100	0001 0010
13	1101	0001 0011
14	1110	0001 0100
15	1111	0001 0101

Communication

ANC8/ANC16 has one isolated RS485 port. As software protocol MODBUS RTU is implemented in the device. Supported functions of MODBUS RTU are as follows:

- Read Holding Registers (03H)
- Write Single Register (06H)
- Write Multiple Registers (10H)

RS485 Connect Line / Diagram



Modbus Table

Address	Parameter Details	R / W	Data Type	Function
0	Alarm flags for channels	RO	16 bit word	03H
1	Status of channels' dip-switch	RO	16 bit word	03H
2	Status of config. dip-switch	RO	16 bit word	03H
3	Latest log index	RO	16 bit word	03H
4	Seconds	R / W	16 bit word	03H-06H-10H
5	Minutes	R / W	16 bit word	03H-06H-10H
6	Hours	R / W	16 bit word	03H-06H-10H
7	Day	R / W	16 bit word	03H-06H-10H
8	Month	R / W	16 bit word	03H-06H-10H
9	Year	R / W	16 bit word	03H-06H-10H
10	Baud Rate	R / W	16 bit word	03H-06H-10H
11	Slave ID	R / W	16 bit word	03H-06H-10H
50	Log 1 Day and month	RO	16 bit word	03H
51	Log 1 Year and hours	RO	16 bit word	03H
52	Log 1 Minutes and seconds	RO	16 bit word	03H
53	Log 1 Data	RO	16 bit word	03H
54	Log 2 Day and month	RO	16 bit word	03H
55	Log 2 Year and hours	RO	16 bit word	03H
56	Log 2 Minutes and seconds	RO	16 bit word	03H
57	Log 2 Data	RO	16 bit word	03H

Address	Parameter Details	R / W	Data Type	Function
58	Log 3 Day and month	RO	16 bit word	03H
59	Log 3 Year and hours	RO	16 bit word	03H
60	Log 3 Minutes and seconds	RO	16 bit word	03H
61	Log 3 Data	RO	16 bit word	03H
62	Log 4 Day and month	RO	16 bit word	03H
63	Log 4 Year and hours	RO	16 bit word	03H
64	Log 4 Minutes and seconds	RO	16 bit word	03H
65	Log 4 Data	RO	16 bit word	03H
66	Log 5 Day and month	RO	16 bit word	03H
67	Log 5 Year and hours	RO	16 bit word	03H
68	Log 5 Minutes and seconds	RO	16 bit word	03H
69	Log 5 Data	RO	16 bit word	03H
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
24358	Log 6076 Day and month	RO	16 bit word	03H
24359	Log 6076 Year and hours	RO	16 bit word	03H
24360	Log 6076 Minutes and seconds	RO	16 bit word	03H
24361	Log 6076 Data	RO	16 bit word	03H
24362	Log 6077 Day and month	RO	16 bit word	03H
24363	Log 6077 Year and hours	RO	16 bit word	03H
24364	Log 6077 Minutes and seconds	RO	16 bit word	03H
24365	Log 6077 Data	RO	16 bit word	03H
24362	Log 6078 Day and month	RO	16 bit word	03H
24363	Log 6078 Year and hours	RO	16 bit word	03H
24364	Log 6078 Minutes and seconds	RO	16 bit word	03H
24365	Log 6078 Data	RO	16 bit word	03H
24362	Log 6079 Day and month	RO	16 bit word	03H
24363	Log 6079 Year and hours	RO	16 bit word	03H
24364	Log 6079 Minutes and seconds	RO	16 bit word	03H
24365	Log 6079 Data	RO	16 bit word	03H
24366	Log 6080 Day and month	RO	16 bit word	03H
24367	Log 6080 Year and hours	RO	16 bit word	03H
24368	Log 6080 Minutes and seconds	RO	16 bit word	03H
24369	Log 6080 Data	RO	16 bit word	03H

NOTE: Maximum 248 data bytes can be received by the master device via MODBUS RTU.

Alarm flags for channels

15	14	13	12	11	10	9	8
16th Channel Alarm Status	15th Channel Alarm Status	14th Channel Alarm Status	13th Channel Alarm Status	12th Channel Alarm Status	11th Channel Alarm Status	10th Channel Alarm Status	9th Channel Alarm Status

7	6	5	4	3	2	1	0
8th Channel Alarm Status	7th Channel Alarm Status	6th Channel Alarm Status	5th Channel Alarm Status	4th Channel Alarm Status	3rd Channel Alarm Status	2nd Channel Alarm Status	1st Channel Alarm Status

Status of channels' dip-switch

15	14	13	12	11	10	9	8
16th Channel	15th Channel	14th Channel	13th Channel	12th Channel	11th Channel	10th Channel	9th Channel

7	6	5	4	3	2	1	0
8th Channel	7th Channel	6th Channel	5th Channel	4th Channel	3rd Channel	2nd Channel	1st Channel

0 → Channel was adjusted as an "Alarm channel" by dip-switch
1 → Channel was adjusted as a "Horn channel" by dip-switch

Configuration Dip-Switch Situations

ANC-8

15	14	13	12	11	10	9	8
Reserved	Reserved	Reserved	Reserved	Reserved	Reserved	Reserved	Reserved

7	6	5	4	3	2	1	0
Reserved	Reserved	t1	t2	t3	Inverse	Buzzer	Cont / Pals

ANC-16

15	14	13	12	11	10	9	8
Reserved	Reserved	Reserved	Reserved	Reserved	Reserved	Reserved	Reserved

7	6	5	4	3	2	1	0
t1	t2	t3	First / Last	Inv. Ch 9-16	Inv. Ch 1-8	Buzzer	Cont / Pals

Latest log index

The latest recorded log index is available to the user/programmer via MODBUS register address 3. ANC8/16 can keep 6080 blocks of event log.

When reserved memory for data logging is full, ANC8/ANC16 start to record "event logs" from the beginning. 6079 is the final log index. Any event after this record will be recorded starting from index 0.

Time / Date Adjustment

Time and date data is readable and writable via MODBUS addresses 4 - 9. Data of these addresses can be changed with MODBUS functions 06H and 10H.

Baud Rate Adjustment

Baud rate is readable and writable via MODBUS address 10. Baud rate can be adjusted to the below values:

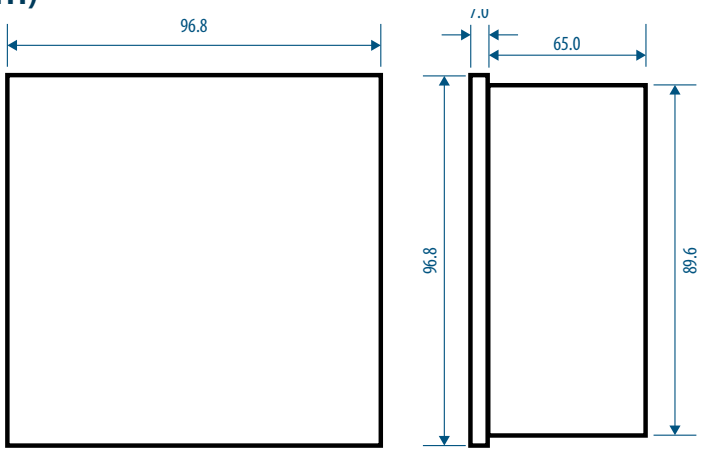
- 1200 bps
- 2400 bps
- 4800 bps
- 9600 bps
- 19200 bps
- 38400 bps
- 57600 bps

Factory default value of baud rate is 9600 bps.

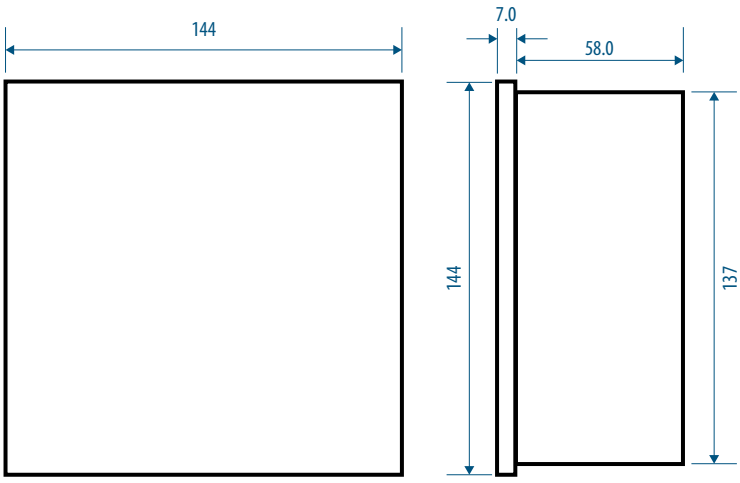
Slave ID Adjustment

Slave ID is readable and writable via MODBUS address 11. Slave ID can be adjusted in the values between 1 and 247. Factory default value of slave ID is 1..

DIMENSIONS (mm)



ANC-8 Dimensions



ANC-16 Dimensions

Technical Specifications

Input

Channel Number	8 (ANC-8) 16 (ANC-16)
Channel Current	< 1.5mA
Input Signal	24V, 48V, 110V and 220V AC/DC

		45Hz	50Hz	60Hz	65Hz	DC
Limits for a signal to be accepted as ON.	**24V**	16V	17V	18V	19V	21V
	48V	32V	33V	35V	38V	42V
	110V	72V	75V	80V	85V	100V
	220V	145V	150V	160V	170V	200V

		45Hz	50Hz	60Hz	65Hz	DC
Limits for a signal to be accepted as OFF.	**24V**	14V	14V	14V	14V	13V
	48V	28V	28V	28V	28V	27V
	110V	67V	67V	67V	67V	62V
	220V	135V	135V	135V	135V	125V

General

Supply Voltage	110..300V AC/DC ± %10
Frequency	45..65 Hz
Power Consumption	< 5VA (ANC-8) < 3W (ANC-8) < 7.5VA (ANC-16) < 5W (ANC-16)
RTC Battery Life	> 5 years
Operation Temperature	-20°C..+70°C
Storage Temperature	-30°C..+80°C
Relative Humidity	Max.90% (with no condensation)
Connection	Screw type terminals
Dimensions	96x96x72 (ANC-8) 144x144x65 (ANC-16)
Protection Class	IP50 (front) IP20 (back)

User Interface

Key Set	4 pieces of ESD protected button
LED indicator (ANC-8)	8 pieces of double-colored-led indicator with back lighting, 1 piece of ON led
	16 pieces of double-colored-led indicator with back lighting, 1 piece of ON led (ANC-16)

Output

Relay Outputs	2 pieces of Form-A relay
Max. Switching current	5A AC, 3A DC
Max. Switching voltage	250V AC, 30V DC
Max. Switching power	1250VA, 90W

Communication

Serial Interface	Isolated RS485 port
Protocol	Modbus RTU
Isolation	2500V RMS
Baud Rate	1200, 2400, 4800, 9600, 19200, 38400, 57600 bps

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ALRC-6

Alarm Kontrol Rölesi
Alarm Relay Controller

İşletme gerilimi (U_N)	24V AC/DC, 48V AC/DC, 110V AC/DC, 220V AC/DC
Sinyal girişi	besleme gerilimleriyle aynı
Gerilim toleransı	± %30 x U_N
Giriş kanal sayısı	6
Giriş empedansı	> 230 KΩ
Çıkış	6 kanal rölesi 1 horn rölesi 1 alarm rölesi
Çıkış kontağı tipi	1 NO
Maksimum anahtarlama akımı	5A
Maksimum anahtarlama gerilimi	250V AC
Maksimum anahtarlama gücü	1250VA
Çalışma sıcaklık aralığı	-20°C .. 60°C
Saklama sıcaklığı	-40°C .. 75°C
Boyutlar	96 x 96 x 72 mm
Koruma sınıfı	önden IP50 arkadan IP20

Supply voltage (U_N)	24V AC/DC, 48V AC/DC, 110V AC/DC, 220V AC/DC
Input signal voltages	same as supply voltage values
Voltage tolerance	± %30 x U_N
Number of inputs	6
Input impedance	> 230 KΩ
Number of outputs	6 channel-relay output 1 horn-relay output 1 alarm relay output
Output relays	1 NO
Maximum switching current	5A
Maximum switching voltage	250V AC
Maximum switching power	1250VA
Operating temperature	-20°C .. 60°C
Storage temperature	-40°C .. 75°C
Dimensions	96 x 96 x 72 mm
Protection class	IP50 front side IP20 rear side

Çalışma Prensibi :

ALRC-6 girişlerine sinyal uygulandığı zaman ilgili kanalın rölesi, horn rölesi ve dip anahtarı ayarlanmışsa alarm rölesi çeker. Giriş sinyali uygulanmaya devam ediyorsa kanalın göstergesi yanıp söner, sinyal kesilmişse gösterge sabit yanmaya devam eder.

"HORN" tuşuna basılınca horn rölesi bırakır. Yeni bir giriş sinyali uygulandığı zaman horn rölesi tekrar çeker.

"DEL" tuşuna basılınca giriş sinyali kesilen kanalların röleleri bırakır ve göstergeleri söner. Bütün kanalların sinyali kesilmişse alarm rölesi bırakır. Giriş sinyalleri devam eden kanalların röleleri ve göstergeleri konumunu korur.

"TEST" tuşuna basıldığı sürece bütün göstergeler sabit yanar. Bu tuşun röleler üzerinde bir etkisi yoktur.

Operation:

Whenever any ALRC-6 input is excited, relay of that channel and horn relay are activated. If the related dip switch (Alarm Relay Enable switch on the rear cover) is adjusted as ON, "alarm relay" will also be activated. If input signal is continous, display of the related channel blinks. If input signal is disconnected, display will be ON.

When HORN button is pressed, the HORN relay will be inactive. When a 'new' input signal is applied to any of the inputs, HORN relay will again be active.

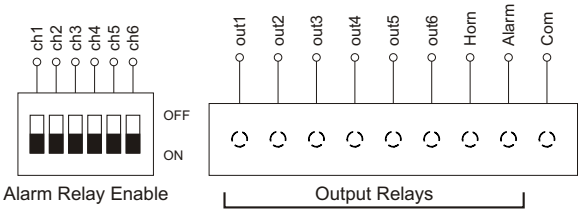
When DEL button is pressed, relays of the channels whose input signals are interrupted will be inactive and displays of these channels will turn-off. For the channels whose input signals are continous, displays and relays maintain their initial state, as described above (relay active, display blinking).

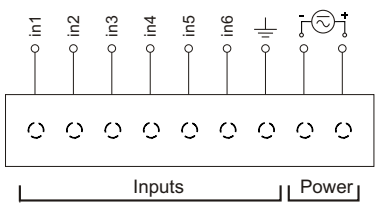
When TEST button is pressed, displays of all channels will flash. This button has no effect on channel relays.

tip	giriş	sipariş no
ALRC-6	24V AC/DC	604 610
ALRC-6	48V AC/DC	604 611
ALRC-6	110V AC/DC	604 612
ALRC-6	220V AC/DC	604 613

type	input	order no
ALRC-6	24V AC/DC	604 610
ALRC-6	48V AC/DC	604 611
ALRC-6	110V AC/DC	604 612
ALRC-6	220V AC/DC	604 613

Bağlantılar / Connections :





Boyutlar / Dimensions: